FCC Information and Copyright

This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. There is no guarantee that interference will not occur in a particular installation.

The vendor makes no representations or warranties with respect to the contents here of and specially disclaims any implied warranties of merchantability or fitness for any purpose. Further the vendor reserves the right to revise this publication and to make changes to the contents here of without obligation to notify any party beforehand.

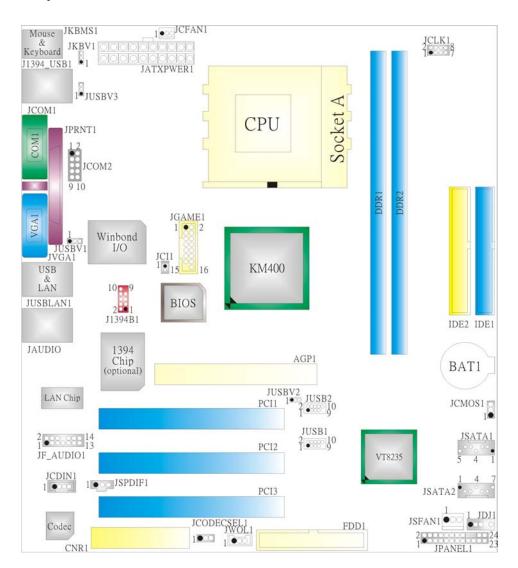
Duplication of this publication, in part or in whole, is not allowed without first obtaining the vendor's approval in writing.

The content of this user's manual is subject to be changed without notice and we will not be responsible for any mistakes found in this user's manual. All the brand and product names are trademarks of their respective companies.

Content

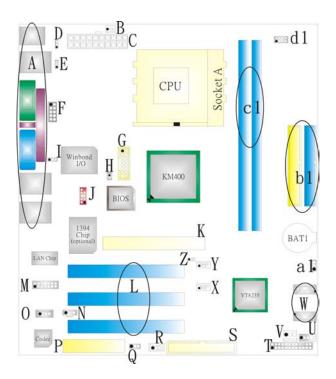
LAYOUT OF M7VIZ400	1
M7VIZ400 COMPONENT INDEX	2
ENGLISH	3
M7VIZ400 Features	3
Package contents	
How to set up Jumper	5
CPU Installation	5
DDR DIMM Modules: DDR1, DDR2	6
Installing DDR Module	6
Jumpers, Headers, Connectors & Slots	6
TROUBLESHOOTING	13
FRANÇAIS	14
Caractéristiques de la M7VIZ400	
Contenu du carton	15
DÉPANNAGE	16

Layout of M7VIZ400



NOTE: • represents the first pin.

M7VIZ400 Component Index



- **Back Panel Connector**
- CPU Fan Connector (JCFAN1)
- **C.** ATX Power Connector (JATXPWR1)
- D. Power Source Selection for Keyboard and Mouse (JKBV1)
- E. Power Source Selection for USB (JUSBV3) T.
- COM2 Header (JCOM2)
- G. Game Port Header (JGAME1) *
- H. Case Open Connector (JCI1)
- Power Source Selection for USB (JUSBV1) X. Front USB Header (JUSB1)
- Front 1394 Header (J1394B1) *
- K. Accelerated Graphics Port Slot (AGP1)
- L. PCI BUS Slots (PCI 1-3)
- M. Front Audio Header (JF_AUDIO1)
- Digital Audio Connector (JSPDIF1)
- CD-ROM Audio-In Header (JCDIN1)

- Communication Network Riser Slot (CNR1)
- CNR Codec/ Onboard Selection (JCODECSEL1)
- Wake On LAN Header (JWOL1)
- Floppy Disk Connector (FDD1)
- Front Panel Connector (JPANEL1)
- Audio DJ Header (JDJ1)
- System FAN Header (JSFAN1)
- W. Serial ATA Connector (JSATA1-2)
- Y. Front USB Header (JUSB2)
- Power Source Selection for USB (JUSBV2)
- a1. Clear CMOS Function (JCMOS1)
- b1. IDE Connectors (IDE1-2)
- c1. DDR Modules (DDR1-2)
- d1. Frequency Selection (JCLK1)

^{*} optional

English

M7VIZ400 Features

A. Hardware

CPU

- Provides Socket A.
- Supports single AMD® Athlon/Duron Family processor.
- Front Side Bus at 200/266/333 MHz.

Chipset

North Bridge: VIA KM400.
South Bridge: VIA VT8235.

Main Memory

- Supports up to 2 DDR devices.
- Supports SPD DDR 200/266/333/400 MHz (without ECC) DDR devices.
- Maximum memory size is 2GB.

Super I/O

- Chip: Winbond W83627HF.
- Meet Low Pin Count (LPC) Spec. 1.0
- Integrate Hardware Monitor functions.
- Support Device Power Management (DPM) and ACPI.

Slots

- Three 32-bit PCI bus master slots.
- One CNR slot. (only Type B)
- One AGP 8X slot.

On Board IDE

- Supports four IDE disk drives.
- Supports PIO Mode 4, Master Mode and Ultra DMA 33/66/100/133 Bus Master Mode.

LAN PHY

- Chip: VIA VT6103.
- Supports 10 Mb/s and 100 Mb/s auto-negotiation
- Half/Full duplex capability.

IEEE 1394 Chip (optional)

- Chip: VIA VT6307.
- Supports 2 IEEE 1394 ports.
- Detects connected device types and automatically configures data speed to 100, 200 or 400 Mbps.

On Board AC'97 Sound Codec

- Chip: CMI9739A.
- Compliant with AC'97 specification.

Supports 6 channels.

On Board Peripherals

a. Rear side

- 1 serial port.
- 1 VGA port.
- 1 parallel port. (SPP/EPP/ECP mode)
- Audio out ports in vertical position.
- 1 RJ-45 LAN jack.
- PS/2 mouse and PS/2 keyboard.
- 2 USB2.0 ports.
- 1 1394A Firewire ports. (optional)

b. Front Side

- 1 floppy port supports 2 FDDs with 360K, 720K, 1.2M, 1.44M and 2.88Mbytes.
- 4 USB2.0 ports.
- 1 front audio header.
- 1 S/PDIF out header.
- 1 1394A Firewire ports. (optional)

Dimensions

ATX Form Factor: 22.4cm X 24.3cm (W X L)

B. BIOS & Software

BIOS

- Award legal BIOS.
- Supports APM1.2.
- Supports ACPI.
- Supports USB Function.

Software

- Supports Warpspeeder™, 9th Touch™, and FLASHER™.
- Offers the highest performance for Windows 98 SE, Windows 2000, Windows Me, Windows XP, UNIX, and Linux Red Hat etc.

Package contents

- HDD Cable X 1
- FDD Cable X 1
- User's Manual X 1
- Fully Setup Driver CD X 1
- USB 2.0 Cable X 1 (optional)
- S/PDIF Cable X 1 (optional)
- Rear I/O Panel for Micro ATX Case X 1 (optional)
- IEEE 1394 Cable X 1 (optional)

How to set up Jumper

The illustration shows to how set up jumper. When the Jumper cap is placed on pins, the jumper is "close". If no jumper cap is placed on the pins, the jumper is "open". The illustration shows a 3-pin jumper whose pin1and 2 are "close" when jumper cap is placed on these 2 pins.







Jumper open

Jumper close

Pin1-2 close

CPU Installation

Step1: Pull the lever sideways away from the socket and then raise the lever up to a 90-degree angle.

Step2: Look for the white dot/cut edge. The white dot/cut edge should point wards the lever pivot. The CPU will fit only in the correct orientation.

Step3: Hold the CPU down firmly, and then close the lever to complete the installation.

Step4: Put the CPU Fan on the CPU and buckle it. Connect the CPU fan power cable to the JCFAN1. This completes the installation.



CPU Fan Header: JCFAN1

1100000110011111					
	Pin	Assignment			
1 • 00	1	Ground			
JCFAN1	2	+12V			
JOI-ANI	3	FAN RPM rate Sense			

System Fan Header: JSFAN1

	Pin	Assignment
1 • 0 0	1	Ground
JSFAN1	2	+12V
JOPANI	3	FAN RPM rate Sense

DDR DIMM Modules: DDR1, DDR2

DRAM Access Time: 2.5V Unbuffered/ Registered DDR 200 MHz (PC1600)/ DDR 266 MHz (PC2100)/ DDR 333 MHz (PC2700) Type required.

DRAM Type: 64MB/ 128MB/ 256MB/ 512MB/ 1GB DIMM Module (184 pin)

DIMM Socket Location	DDR Module		Total Memory Size (MB)
DDR 1	64MB/128MB/256MB/512MB/1GB	*1	Max is
DDR 2	64MB/128MB/256MB/512MB/1GB	*1	2GB

^{***}Only for reference***

Installing DDR Module

 Unlock a DIMM slot by pressing the retaining clips outward. Align a DIMM on the slot such that the notch on the DIMM matches the break on the slot.



Insert the DIMM vertically and firmly into the slot until the retaining chip snap back in place and the DIMM is properly seated.



Jumpers, Headers, Connectors & Slots

Floppy Disk Connector: FDD1

The motherboard provides a standard floppy disk connector that supports 360K, 720K, 1.2M, 1.44M and 2.88M floppy disk types. This connector supports the provided floppy drive ribbon cables.

Hard Disk Connectors: IDE1/IDE2

The motherboard has a 32-bit Enhanced PCI IDE Controller that provides PIO Mode 0~5, Bus Master, and Ultra DMA 33/ 66/ 100/ 133 functionality. It has two HDD connectors IDE1 (primary) and IDE2 (secondary).

The IDE connectors can connect a master and a slave drive, so you can connect up to four hard disk drives. The first hard drive should always be connected to IDE1.

Peripheral Component Interconnect Slots: PCI 1-3

This motherboard is equipped with 3 standard PCI slots. PCI stands for Peripheral Component Interconnect, and it is a bus standard for expansion cards. This PCI slot is designated as 32 bits.

Accelerated Graphics Port Slot: AGP1

Your monitor will attach directly to that video card. This motherboard supports video cards for PCI slots, but it is also equipped with an Accelerated Graphics Port (AGP). An AGP card will take advantage of AGP technology for improved video efficiency and performance, especially with 3D graphics.

Communication Network Riser Slot: CNR1

The CNR specification is an open Industry Standard Architecture, and it defines a hardware scalable riser card interface, which supports modem only.

Serial ATA Connector: JSATA1/JSATA2

The motherboard has a PCI to SATA Controller with 2 channels SATA interface, it satisfies the SATA 1.0 spec and can transfer data with 1.5 Gb/s speed.

Note:

- When plugging SATA HDD on JSATA1 connector, SATA BIOS will automatically detect as channel 1.
- When plugging SATA HDD on JSATA2 connector, SATA BIOS will automatically detect as channel 0.

Front Panel Connector: JPANEL1

JPANEL1 SLP PWR LED ON/OFF IR 2 1 SPK HLED RST IR					
Pin	Assignment	Function	Pin	Assignment	Function
1	+5V	Speaker	2	Sleep Control	Sleep
3	NA	Connector	4	Ground	Button
5	NA		6	NA	NA
7	Speaker		8	Power LED (+)	POWER
9	HDD LED (+)	Hard Drive	10	Power LED (+)	LED
11	HDD LED (-) LED		12	Power LED (-)	
13	Ground	Reset	14	Power Button	Power-on
15	Reset Control	Button	16	Ground	Button
17	NA		18	KEY	
19	NA	IrDA	20	KEY	IrDA
21	+5V	Connector	22	Ground	Connector
23	IRTX		24	IRRX	

Power Connectors: JATXPWR1

	PIN	Assignment	PIN	Assignment
	1	+3.3V	11	+3.3V
	2	+3.3V	12	-12V
20 00000000000000011	3	Ground	13	Ground
	4	+5V	14	PS_ON
LA TYPIA/D4	5	Ground	15	Ground
JATXPWR1	6	+5V	16	Ground
	7	Ground	17	Ground
	8	PW_OK	18	-5V
	9	Standby Voltage +5V	19	+5V
	10	+12V	20	+5V

Power Source Selection for Keyboard/ Mouse: JKBV1

JKBV1	Assignment	Description
Pin 1-2 close	+5V	+5V for keyboard and mouse
³ Pin 2-3 close	+5V Standby Voltage	PS/2 Mouse and PS/2 Keyboard are powered with +5V standby voltage

Note: In order to support the function "power-on the system via keyboard and mouse function, "JKBV1" jumper cap should be placed on pin 2-3.

Power Source Selection for USB: JUSBV1/ JUSBV2/ JUSBV3

JUSBV1/JUSBV2/ JUSBV3	Assignment	Description
1 3 Pin 1-2 close	+5V	JUSBV3: 5V for USB located at the J1394_USB1 port connector JUSBV2: 5V for USB located at the JUSB2/ JUSB1 port connectors JUSBV1: 5V for USB located at the JUSBLAN1 port connector
1 3 Pin 2-3 close	+5V Standby Voltage	JUSBV3: J1394_USB1 port is powered with standby voltage of 5V JUSBV2: JUSB2/ JUSB1 ports is powered with standby voltage of 5V JUSBV1: JUSBLAN1 port is powered with standby voltage of 5V

Note: In order to support the function "power-on the system via USB devices function, "JUSBV1/JUSBV2/ JUSBV3" jumper cap should be placed on pin 2-3 respectively.

Clear CMOS Jumper: JCMOS1

JCMOS1	Assignment
Pin 1-2 Close	Normal Operation (default)
³ ○ Pin 2-3 Close	Clear CMOS Data

% Clear CMOS Procedures:

- 1. Remove AC power line.
- 2. Set the jumper to "Pin 2-3 Close".
- 3. Wait for five seconds.
- 4. Set the jumper to "Pin 1-2 Close".
- 5. Power on the AC.
- 6. Reset your desired password or clear the CMOS data.

Case Open Connector: JCI1

1	Pin	Assignment
1 O Java	1	Case Open Signal
JCI1	2	Ground

Serial ATA Connector: JSATA1/ JSATA2

65 3 2	Pin	Assignment	Pin	Assignment
00000	1	Ground	2	TX+
7 4 1	3	TX-	4	Ground
JSATA1/ JSATA2	5	RX-	6	RX+
	7	Ground		

CD-ROM Audio-In Header: JCDIN1

	Pin	Assignment
1 •000 4	1	Left Channel Input
* '	DIN1 2	Ground
	3	Ground
	4	Right Channel Input

Front Panel Audio Header: JF_AUDIO1

2 000 000 14 1 •000000 13 JF_AUDIO1				
Pin	Assignment	Pin	Assignment	
1	Mic In/ Center	2	Ground	
3	Mic Power/ Bass	4	Audio Power	
5	Right Line Out/ Speaker Out Right	6	Right Line Out/ Speaker Out Right	
7	Reserved	8	Key	
9	Left Line Out/ Speaker Out Left	10	Left Line Out/ Speaker Out Left	
11	Right Line In/ Rear Speaker Right	12	Right Line In/ Rear Speaker Right	
13	Left Line In/ Rear Speaker Left	14	Left Line In/ Rear Speaker Left	

Digital Audio Connector: JSPDIF1

1 • 0 0 3	Pin	Assignment
	1	+5V
ISBDIE4	2	SPDIF_OUT
JSPDIF1	3	Ground

Front USB Header: JUSB2, JUSB1

0 1	Pin	Assignment	Pin	Assignment
	1	+5V(fused)	2	+5V(fused)
10 00000 2	3	USB-	4	USB-
JUSB1/ JUSB2	5	USB+	6	USB+
	7	Ground	8	Ground
	9	KEY	10	NC

Front 1394 Header: J1394B1

		Pin	Assignment	Pin	Assignment
10 0 9		1	A+	2	A-
ÖÖ		3	Ground	4	Ground
2 00 1	J1394B1	5	B+	6	B-
	0.00.2.	7	+12V	8	+12V
		9	KEY	10	Ground

Wake On LAN Header: JWOL1

	Pin	Assignment
1 000	1	+5V_SB
1 400	2	Ground
JWOL1	3	Wake up

M7VIZ400

CNR Codec/ Onboard Selection: JCODECSEL1

JCODECSEL1		Assignment
1 3	Pin 1-2 Close	Onboard Codec is used (default)
1 3	Pin 2-3 Close	CNR Codec is used

Frequency Selection: JCLK1

Pin	200 MHz	266 MHz (Default)	333 MHz
1-2	Close	Open	Open
3-4	Close	Close	Open
5-6	Open	Open	Open
7-8	Open	Open	Open

Note: Factory default setting is 266MHz.

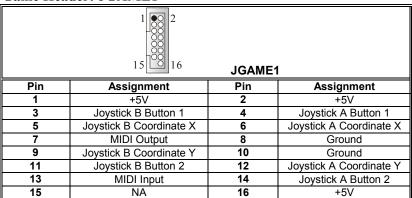
Audio DJ: JDJ1

1 5	Pin	Assignment	Pin	Assignment
	1	SMBDT	2	SMBCK
	3	-INTR_B	4	NA
JDJ1	5	PWRGD		

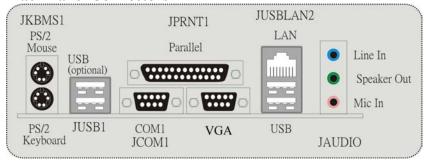
COM2 Header: JCOM2

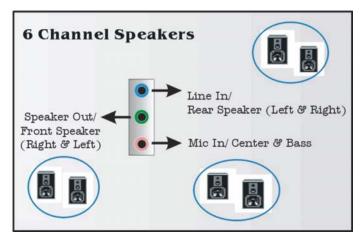
	1	JCON	Л2
Pin	Assignment	Pin	Assignment
1	RIN1	2	RIN3
3	DOUT2	4	DOUT3
5	Ground	6	RIN2
7	DOUT1	8	RIN4
9	-XRI1	10	NA

Game Header: JGAME1



Back Panel Connectors





Troubleshooting

PROBABLE	SOLUTION
No power to the system at all Power light don't illuminate, fan inside power supply does not turn on. Indicator light on keyboard does not turn on	* Make sure power cable is securely plugged in * Replace cable * Contact technical support
System inoperative. Keyboard lights are on, power indicator lights are lit, hard drive is spinning.	* Using even pressure on both ends of the DIMM, press down firmly until the module snaps into place.
System does not boot from hard disk drive, can be booted from CD-ROM drive.	* Check cable running from disk to disk controller board. Make sure both ends are securely plugged in; check the drive type in the standard CMOS setup.
	* Backing up the hard drive is extremely important. All hard disks are capable of breaking down at any time.
System only boots from CD-ROM. Hard disk can be read and applications can be used but booting from hard disk is impossible.	* Back up data and applications files. Reformat the hard drive. Re-install applications and data using backup disks.
Screen message says "Invalid Configuration" or "CMOS Failure."	* Review system's equipment . Make sure correct information is in setup.
Cannot boot system after installing second hard drive.	* Set master/slave jumpers correctly. * Run SETUP program and select correct drive types. Call drive manufacturers for compatibility with other drives.

Français

Caractéristiques de la M7VIZ400

A. Matériel

Processeur

- Fournit un support Socket A.
- Prend en charge un unique processeur AMD[®] de la famille Athlon/ Duron.
- Bus face avant à 200/266/333 MHz.

Chipset

Pont nord : VIA KM400.
Pont sud : VIA VT8235

Mémoire principale

- Prend en charge 2 barrettes DDR.
- Prend en charge la mémoire DDR (sans ECC) à 200/266/333 MHz.
- Taille maximale de mémoire : 2 Go.

Super E/S

Puce: Winbond W83697HF.

Expansion

- Trois emplacements PCI 32 bits bus maître.
- Un emplacement CNR. (Type B uniquement)
- Un emplacement AGP 8X.

IDE intégré

- Prend en charge quatre lecteurs de disques IDE.
- Prend en charge les modes PIO 4, Maître et bus maître Ultra DMA 33/66/100/133.

Réseau

- Puce : VIA VT6103.
- Prend en charge la négociation automatique 10 Mb/s et 100 Mb/s
- Capacité semi duplex/duplex complet.

Puce IEEE 1394 (option)

- Puce : VIA VT6307.
- Prend en charge 2 ports IEEE 1394.
- Détecte les périphériques connectés et configure automatique la vitesse de transfert des données à 100, 200 ou 400 Mb/s.

Codec son AC'97 intégré

- Puce : CMI9739A.
- Conforme à la spécification AC'97.
- Prend en charge 6 canaux.

Périphériques intégrés

a. Face arrière

M7VIZ400

- 1 port série.
- 1 port VGA.
- 1 port parallèle. (mode SPP/EPP/ECP)
- Ports audio en position verticale.
- 1 prise réseau RJ-45.
- Souris et clavier PS/2.
- 2 ports USB2.0.
- 1 port 1394A Firewire. (option)

b. Face avant

- 1 port pour lecteur de disquettes prend en charge deux lecteurs de disquettes avec 360K, 720K, 1,2M, 1,44M et 2,88 Mo.
- 2 ports USB2.0. (4 ports USB2.0 uniquement avec le pont sud VT8237)
- 1 connecteur audio avant.
- 1 connecteur S/PDIF.
- 1 port 1394A Firewire. (option)

Dimensions

Facteur de forme ATX: 22,1 X 24,5cm (I X L)

B. BIOS et logiciel

BIOS

- BIOS Award.
- Prend en charge APM1.2.
- Prend en charge ACPI.
- Prend en charge la fonction USB.

Logiciel

- Prend en charge Warpspeeder™, 9th Touch™, FLASHER™ et.
- Offre la meilleure performance sous Windows 98 SE, Windows 2000, Windows Me, Windows XP, SCO UNIX, Linux Red Hat etc.

Contenu du carton

- Câble pour disque dur X1
- Câble pour lecteur de disquette X1
- Manuel de l'utilisateur X1
- CD complet d'installation des pilotes X 1
- Câble USB 2.0 X1 (option)
- Câble S/PDIF X 1(option)
- Panneau d'E/S arrière pour châssis ATX X 1 (option)
- Câble IEEE 1394 X 1 (option)

Dépannage

PROBLÈME	SOLUTION
Pas d'alimentation au système. Les voyants lumineux ne s'allument pas, le ventilateur à	* Assurez-vous que le câble d'alimentation est bien branché
l'intérieur du bloc d'alimentation ne se met pas en marche. Le voyant du clavier ne s'allume pas	* Remplacez le câble
en marche. Le voyant de diavier ne è allame pae	* Contactez le service d'assistance technique.
Le système ne fonctionne pas. Les voyants du clavier sont allumés, les voyants de l'alimentation aussi, le disque dur tourne.	* En exerçant une pression uniforme sur les deux extrémités du DIMM, poussez le module vers le bas jusqu'à ce qu'il s'enclenche.
Le système ne se réinitialise pas du disque dur, réinitialisation possible depuis le lecteur CD-ROM.	* Vérifiez le câble du disque à la carte du contrôleur de disque. Assurez-vous que les deux extrémités sont bien branchées ; vérifiez le type de lecteur dans la configuration standard de CMOS.
	* Il est très important d'effectuer des sauvegardes du disque dur. Les disques durs peuvent tomber en panne à n'importe quel moment.
Le système ne se réinitialise que depuis le CD-ROM. Le disque dur peut être lu et les applications sont utilisables mais il est impossible d'effectuer de réinitialisation depuis le disque dur.	* Effectuez une sauvegarde des fichiers des données et d'application. Reformatez le disque dur. Ré-installez les applications et les données sauvegardées sur les disques de secours.
Un message s'affiche indiquant que la configuration n'est pas valide ou qu'il y a une panne du CMOS.	* Vérifiez l'équipement du système. Assurez-vous que les informations de la configuration sont correctes.
Impossible de réinitialiser le système après l'installation d'un deuxième disque dur.	* Réglez les cavaliers maître/esclave correctement.
	* Exécutez le programme SETUP et sélectionnez les types de lecteur. Contactez les fabricants pour toute question de compatibilité avec les autres disques.

WarpSpeeder™



Introduction

[WarpSpeeder™], a new powerful control utility, features three user-friendly functions including Overclock Manager, Overvoltage Manager, and Hardware Monitor.

With the Overclock Manager, users can easily adjust the frequency they prefer or they can get the best CPU performance with just one click. The Overvoltage Manager, on the other hand, helps to power up CPU core voltage and Memory voltage. The cool Hardware Monitor smartly indicates the temperatures, voltage and CPU fan speed as well as the chipset information. Also, in the About panel, you can get detail descriptions about BIOS model and chipsets. In addition, the frequency status of CPU, memory, AGP and PCI along with the CPU speed are synchronically shown on our main panel.

Moreover, to protect users' computer systems if the setting is not appropriate when testing and results in system fail or hang, [WarpSpeeder™] technology assures the system stability by automatically rebooting the computer and then restart to a speed that is either the original system speed or a suitable one.

System Requirement

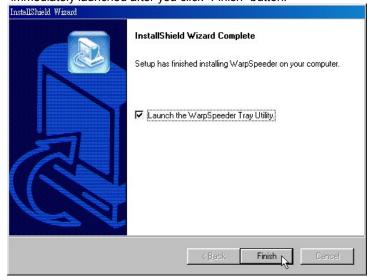
OS Support: Windows 98 SE, Windows Me, Windows 2000, Windows XP DirectX: DirectX 8.1 or above. (The Windows XP operating system includes DirectX 8.1. If you use Windows XP, you do not need to install DirectX 8.1.)

Installation

1. Execute the setup execution file, and then the following dialog will pop up. Please click "Next" button and follow the default procedure to install.



2. When you see the following dialog in setup procedure, it means setup is completed. If the "Launch the WarpSpeeder Tray Utility" checkbox is checked, the Tray Icon utility and [WarpSpeeder™] utility will be automatically and immediately launched after you click "Finish" button.



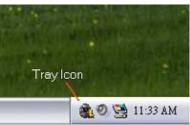
Usage

The following figures are just only for reference, the screen printed in this user manual will change according to your motherboard on hand.

[WarpSpeeder™] includes 1 tray icon and 5 panels:

1. Tray Icon:

Whenever the Tray Icon utility is launched, it will display a little tray icon on the right side of Windows Taskbar.



This utility is responsible for conveniently invoking [WarpSpeeder™] Utility. You can use the mouse by clicking the left button in order to invoke [WarpSpeeder™] directly from the little tray icon or you can right-click the little tray icon to pop up a popup menu as following figure. The "Launch Utility" item in the popup menu has the same function as mouse left-click on tray icon and "Exit" item will close Tray Icon utility if selected.



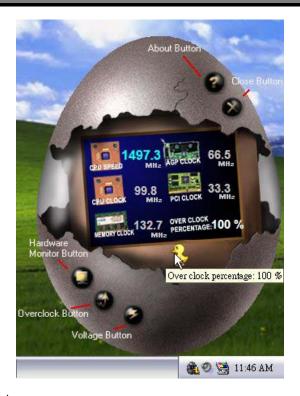
2. Main Panel

If you click the tray icon, [WarpSpeeder $^{\text{TM}}$] utility will be invoked. Please refer do the following figure; the utility's first window you will see is Main Panel.

Main Panel contains features as follows:

- a. Display the CPU Speed, CPU external clock, Memory clock, AGP clock, and PCI clock information.
- b. Contains About, Voltage, Overclock, and Hardware Monitor Buttons for invoking respective panels.
- c. With a user-friendly Status Animation, it can represent 3 overclock percentage stages:

Man walking => overclock percentage from 100% ~ 110 % Panther running => overclock percentage from 110% ~ 120% Car racing => overclock percentage from 120% ~ above



3. Voltage Panel

Click the Voltage button in Main Panel, the button will be highlighted and the Voltage Panel will slide out to up as the following figure.

In this panel, you can decide to increase CPU core voltage and Memory voltage or not. The default setting is "No". If you want to get the best performance of overclocking, we recommend you click the option "Yes".



4. Overclock Panel

Click the Overclock button in Main Panel, the button will be highlighted and the Overclock Panel will slide out to left as the following figure.



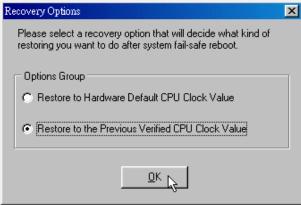
Overclock Panel contains the these features:

a. "-3MHz button", "-1MHz button", "+1MHz button", and "+3MHz button": provide user the ability to do real-time overclock adjustment.

Warning:

Manually overclock is potentially dangerous, especially when the overclocking percentage is over 110 %. We strongly recommend you verify every speed you overclock by click the Verify button. Or, you can just click Auto overclock button and let [WarpSpeeder $^{\text{TM}}$] automatically gets the best result for you.

b. "Recovery Dialog button": Pop up the following dialog. Let user select a restoring way if system need to do a fail-safe reboot.



- d. "Auto-overclock button": User can click this button and [WarpSpeeder™] will set the best and stable performance—and frequency automatically. [WarpSpeeder™] utility will execute a series of testing until system fail. Then system will do fail-safe reboot by using Watchdog function. After reboot, the [WarpSpeeder™] utility will restore to the hardware default setting or load the verified best and stable frequency according to the Recovery Dialog's setting.
- e. "Verify button": User can click this button and [WarpSpeeder™] will proceed a testing for current frequency. If the testing is ok, then the current frequency will be saved into system registry. If the testing fail, system will do a fail-safe rebooting. After reboot, the [WarpSpeeder™] utility will restore to the hardware default setting or load the verified best and stable frequency according to the Recovery Dialog's setting.

Note

Because the testing programs, invoked in Auto-overclock and Verify, include DirectDraw, Direct3D and DirectShow tests, the DirectX 8.1 or newer runtime library is required. And please make sure your display card's color depth is High color (16 bit) or True color(24/32 bit) that is required for Direct3D rendering.

5. Hardware Monitor Panel

Click the Hardware Monitor button in Main Panel, the button will be highlighted and the Hardware Monitor panel will slide out to left as the following figure.

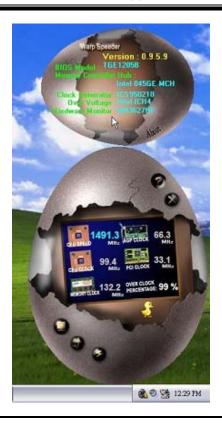
In this panel, you can get the real-time status information of your system. The information will be refreshed every 1 second.



6. About Panel

Click the About button in Main Panel, the button will be highlighted and the About Panel will slide out to up as the following figure.

In this panel, you can get model name and detail information in hints of all the chipset that are related to overclocking. You can also get the mainboard's BIOS model and the Version number of [WarpSpeeder™] utility.



Note: Because the overclock, overvoltage, and hardware monitor features are controlled by several separate chipset, [WarpSpeeder $^{\text{TM}}$] divide these features to separate panels. If one chipset is not on board, the correlative button in Main panel will be disabled, but will not interfere other panels' functions. This property can make [WarpSpeeder $^{\text{TM}}$] utility more robust.

M7VIZ400

06/04/2004